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GENERAL REQUIREMENTS FOR THE PREPARATION OF BRIEFING AIDS

1. SCOPE

1.1 This specification covers the general requirements for the preparation of briefing aids.

2. REQUIREMENTS

2.1 General - Briefing aids are required to amplify presentations, pertaining to various phases of research and development contracts. Usually the briefing material is required as an adjunct to proposals, to assist in presenting the goals of, or concepts involved in, a particular program. Briefing material may also be utilized as instructional matter to assist in explaining new equipment and systems to using personnel.

2.2 Preparation - Because the intended purpose of the briefing aids varies; the number, content, and type are subject to the discretion of the Technical Representative.

2.2.1 Prior to starting work on the finished aid, a preliminary pencil sketch approximately one half the finished size will be submitted to the Technical Representative for approval. The preliminary sketch will indicate the proposed color scheme to be used on the finished aid.

2.3 Format - Briefing aids will be supplied in one or more of the following formats and are subject to the parameters indicated.

2.3.1 Briefing Boards

2.3.1.1 Board Sizes:

Horizontal format:	23" high by 28" wide (use whenever possible)
Vertical format:	28" high by 23" wide
Double format:	30" high by 37" wide

(NOTE: 2 in. corner radii on All Boards)

Declass Review by NGA.

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2.3.1.2 Board Materials:

Crescent Grey and White #196 or equal.

2.3.1.3 Type Style and Sizes:

Style - Futura Semi-Bold
Title - 48 pt
Subtitle - 48 pt
Annotations - 42-18 pt (as necessary)

2.3.2 Viewgraphs

2.3.2.1 Viewgraph Frame:

Size - 10$\frac{1}{4}$" high by 14 3/4" wide
(major axis always horizontal)

2.3.2.2 Image Area: Size - 7 5/8" high by 9 3/8" wide.

2.3.2.3 Type Style and Sizes: Style - Alternate Gothic No. 1 (Condensed)
Title - 30 pt
Subtitle - 24 pt
Annotations or other copy - 18-14 pt

2.3.3 Teleprompter Slides

2.3.3.1 Glass Mount: Size - 3$\frac{1}{4}$" high by 4" wide
(major axis always horizontal)

2.3.3.2 Image Area: Size - 2 5/8" high by 3$\frac{1}{2}$" wide

2.3.3.3 Type Style and Sizes: Style - Alternate Gothic No. 1 (Condensed)
*Title - 30 pt
*Subtitle - 24 pt
*Annotations or other copy - 18-14 pt

*Based upon preparation of art work at proportionate image area size of 7 5/8" by 9 3/8" wide.

2.4 Shipment - Briefing aids will be packaged in containers suitable to insure arrival at destination in an undamaged condition, and shipped to the address indicated in the contract or supplied by the Technical Officer. If material is classified, shipments will be in accordance with applicable security regulations.

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CONTRACTUAL DOCUMENTATION TO BE SUPPLIED BY CONTRACTORS

1. SCOPE

1.1 This Specification covers the contractual documentation to be supplied by contractors in the performance of Research and Development contracts.

2. REQUIREMENTS

2.1 General - In order to maintain proper control the progress and funding of Research and Development contracts, it is necessary that certain orderly reporting be accomplished by the Contractor on a regularly scheduled basis.

2.1.1 All documentation submitted by the Contractor shall bear the control number assigned by the Contracting Officer's Technical Representative. This control number shall appear on all correspondence, reports, etc., submitted by the contractor under the contract.

2.2 Types of Reports - The following types of reports shall be submitted by the contractor. Specific reports shall include, but not necessarily be limited to, the designated information.

2.2.1 Monthly - A monthly report shall be prepared as of the last working day of each calendar month. The first monthly report shall be prepared as of the last working day of the first full calendar month subsequent to the date of contract. Monthly reports shall be mailed so as to reach the consignee(s), stated in the contract, not later than the first business day after the fifteenth of the month following the reporting period. Each Monthly report shall provide the following, with negative reporting if applicable.

2.2.1.1 A statement of the activity on the project during the month and the percentage of work completed as of the reporting date.

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2.2.1.2 A statement of the planned activity for the next month.

2.2.1.3 A statement of pending, unresolved technical problems.

2.2.1.4 A statement of pending, unresolved contractual problems.

2.2.1.5 A statement for the record, of agreements or understandings reached orally during the reporting period on technical matters not requiring the approval of the Contracting Officer.

2.2.1.6 A statement of any proposed change, agreement or understanding which requires the approval of the Contracting Officer. The contractor is cautioned not to proceed in a situation requiring the prior approval of the Contracting Officer until such approval has been obtained. In situations requiring correspondence with the Contracting Officer, a complimentary copy shall be forwarded, simultaneously, directly to the Contracting Officer's Technical Representative.

2.2.1.7 A statement of unanswered, unresolved matters, unanswered correspondence, etc., and whether delinquency is attributed to the contractor or to the Government.

2.2.1.8 Status of funds. The format shown in Enclosure 1 shall be used to report the status of funds. All applicable items shall be reported. If no expenditures or obligations have been incurred for a specific item, the word "None" shall be entered in the space assigned for the dollar amount.

2.2.2 Final Report - The final report shall be submitted to the Contracting Officer's Technical Representative on or before the thirtieth day following completion of the work under the contract. This report shall cover the entire design and/or development work accomplished during the period of performance and shall contain a section covering the work performed under each of the tasks set forth in the Work Statements. The report shall state concisely but completely the major problems encountered, the apparent cause of the problems, the problem solutions and an evaluation of the solutions based on actual application of the solutions.

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2.2.3 Installation Engineering Data - Whenever hardware is a deliverable item under a contract the contractor shall provide the Installation Engineering Data requested on Enclosure 2. The Contracting Officer's Technical Representative shall provide the blank forms to the Contractor. Preliminary data shall be submitted to the Contracting Officer's Technical Representative at six months and again at three months prior to the delivery date of the equipment. Final data shall be submitted by the contractor not less than thirty days prior to the delivery of the equipment.

2.2.3.1 The outline drawing, submitted with the Installation Engineering Data form shall show:

(a) the orientation of the equipment within the work area for normal equipment useage.

(b) the exact location of all external connections.

(c) the clearance required around the equipment for access to all removeable panels, doors, etc.

(d) the location of mounting points and type of mounting required.

2.3. Delivery of Reports - All monthly reports and the final report shall be forwarded by the contractor to the Consignee(s) specified in the contract. The contractor shall forward each report in the number of copies specified in the contract.

2.3.1 The Installation Engineering Data form plus the outline drawing shall be forwarded to the Contracting Officer's Technical Representative.

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Statement of Funds as of 30 September 19XX (See Note 1)

EXPENDITURES

1.	Labor:		
	a. Total paid as of 31 August 19XX	XX,XXX	
	b. Paid during September 19XX	X,XXX	
	c. Sub-total		XX,XXX
2.	Material:		
	a. Total paid as of 31 August 19XX	X,XXX	
	b. Paid during September 19XX	XXX	
	c. Sub-total		X,XXX
3.	Services (sub-contracts, etc.):		
	a. Total paid as of 31 August 19XX	X,XXX	
	b. Paid during September 19XX	XXX	
	c. Sub-total		X,XXX
4.	Total expenditures as of 30 September 19XX		XX,XXX

OBLIGATIONS AND ESTIMATES

5.	Obligations:		
	a. Sub-contract W/ABC Co., amount not yet paid	X,XXX	
	b. Sub-contract W/DEF Co., amount not yet paid	XXX	
	c. Material ordered but not yet paid for	XXX	
	Sub-total		X,XXX
6.	Estimates of Future Expenditures:		
	a. Estimate of labor required	X,XXX	
	b. Estimate of material required	XXX	
	c. Proposed sub-contracts	XXX	
	Sub-total		X,XXX
	Total		XX,XXX

Enclosure 1

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NOTES:

1. All amounts shown above must include overhead, G&A, handling charges, fees, etc.

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INSTALLATION ENGINEERING DATA

Date form completed _____

(See Remarks at end of form)

Tentative [ ] Valid until _____

Final data [ ]

I. INSTRUMENT
- A. Name of instrument: _____
- B. Manufacturer: _____
- C. Contract number: _____
- D. Delivery date: Tentative: _____ Final: _____

II. PHYSICAL FEATURES
- A. Sub-assemblies:
  1. Number of sub-assemblies: _____
  2. Largest sub-assembly: Weight _____lbs; _____" H x _____" W x _____" D
  3. Heaviest sub-assembly: Weight _____lbs; _____" H x _____" W x _____" D
- B. Assembled instrument:
  1. Number of major components: _____
  2. Largest component: Weight _____lbs; _____" H x _____" W x _____" D
  3. Heaviest component: Weight _____lbs; _____" H x _____" W x _____" D
  4. Total floor space required after assembly, including maintenance access space. ___Ft. ___In. High x ___Ft. ___In. Wide x ___Ft. ___In. Deep.
  5. Total weight of assembled instrument: _____lbs.
- C. Type of base of mount: Flat ____; 3-point suspension ____; 4-point suspension ___
- D. Does the instrument have built-in mobility? Yes ____ No ____
- E. Is the instrument particularly sensitive to vibration? Yes ____ No ____
  Will the instrument generate vibration? Yes ____ No ____
- F. Are any special or unusual tools or fixtures necessary or adviseable for the installation of the maintenance of this instrument? Yes ____ No ____.
  If "Yes," please describe: _____

III. UTILITIES
- A. Electrical:

	AC	DC
1. Voltage	_____Volts / _____Volts	_____Volts / _____
2. Current	_____Amps/phase	_____Amps
3. Frequency	_____cps	
4. Nr. of phases	_____Ph	
5. Nr. of wires	_____	
6. Power required	_____Watts	_____Watts
7. Power factor	_____(Leading) (Lagging)	

  8. Type of outlet: Two prong ___; three prong ___; Twist lock ___; Perm.___
  9. Type of ground: Building conduit ___; Direct earth ground ____.
  10. Should the instrument be shielded, either from external electromagnetic signals or to prevent interference with other equipment? Yes ____No____
  If "Yes," to what extent? _____

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B. Air conditioning:

1. Desired environment: Room air temperature of ___ °F ± ___ °F and relative humidity of ___% ± ___%.
2. Input Air: Is a direct connection necessary? Yes ___ No ___; Adviseable? Yes ___ No ___; If "Yes," what is the connector type and size? _____ Recommended input air temperture ___ °F ± ___ °F. Relative humidity ___% ± ___%. If input air must be filtered, what is the maximum particle size in microns? ___ What particle count? _____/ cu. ft.
3. Output Air: Is a direct connection to the return air duct necessary? Yes ___ No ___. Adviseable? Yes ___ No ___. Connector type and size? _____. Output air temperature ___ °F ± ___ °F. Relative humidity ___% ± ___%. Output heat ___BTU/Hr. Flow of ___CFM. Is output air toxic? Yes ___ No ___; Noxious? Yes ___ No ___.

C. Plumbing:

1. Is water required? Yes ___ No ___; Pressure ___PSIG, flow ___GPM.
2. Type of water required:
   Tap ___ °F ± ___ °F Deionized ___ °F ± ___ °F
   Tempered ___ °F ± ___ °F Filtered ___ °F ± ___ °F
   If filtered, give maximum permissible particle size in microns and the maximum permissible count. _____ microns _____ particles/cu. ft.
3. Pipe required:
   Galvanized ___ Copper ___ Size _____
   Stainless Steel ___ Plastic ___ Type of connector _____
4. Floor drain:
   Diameter of drain ___ Galvanized drain? ___
   Plastic drain? ___ Glass drain? ___
5. Are any chemical solutions used in the device? Yes ___ No ___. If "Yes," state the nature of the solution(s), permissible temperature range, flow rate in appropriate units and the filtration necessary for each solution _____.
6. Size of pipes and connectors _____.

D. Compressed air:
Is compressed air required? Yes ___ No ___. Water free? ___ Oil Free? ___
Type and size of connector? _____. Pressure _____PSIG. Flow in CFM
Maximum ____, minimum ____, average ____.

E. Vacuum:
Is vacuum required? Yes ___ No ___. Pressure ___PSIA or (inches of water) (millimeters of mercure). Displacement in CFM, maximum _____, minimum _____, average _____. Type and Size of connectors _____.

F. Peripheral Devices:
Will the instrument be connected to any peripheral devices such as a computer or data input or data output device? Yes ___ No ___. If "Yes," give, in detail, the nature of the connection to the peripheral device such as coaxial cable, multiple wire connector, etc.

IV. REMARKS

A. Use additional sheets if more space is required for environmental conditions or utilities not mentioned above.
B. Submit three typed copies of the completed form to the Technical Representative.

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C. Attach three copies of a dimensioned outline drawing of each major component and of the completed assembly. Include the estimated weight of each major component and of the completed assembly. Indicate, on the outline drawing of the completed assembly, the space required for access to the instrument for maintenance.

D. If a question does not apply to the instrument, insert "N/A" (Not Applicable) in the appropriate blank space.

Information provided by:

_____
(Signature)

_____
(Position or job title)

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6 November 1967

DESIGN OBJECTIVES
ADVANCED LIGHT TABLE PROTOTYPE

1. INTRODUCTION:

These development objectives describe the requirements to be met in designing and fabricating an Advanced Light Table Prototype: the pre-production model of an advanced 9 1/2 X 18 inch format photo interpretation light table. The table to be designed will incorporate the best design features of the [redacted] Model 603 light table and the [redacted] Model 787-1 light table, engineering prototypes developed under previous contracts. The prototypes of these earlier tables will be available for inspection by the Contractor. Copies of the engineering drawings and specifications will be provided to the Contractor for analysis and quotation.

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2. CONCEPT:

The Advanced Light Table will provide increased operator comfort, increased illumination, easy loading, and a superior film transport system. It is to be as light-weight, compact, and simple in mechanical design as is possible within the parameters imposed by the specific requirements stated in these objectives.

3. GENERAL DESCRIPTION:

The table will generally employ the design of the [redacted] table Model 603's basic film transport system and tilting system, and the [redacted] table Model 787-1's basic illumination system or equivalent. The new table will, however, be much lighter in weight, slightly smaller in overall size, less complex, quieter, and less expensive than either the Model 603 or 787-1.

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4. REQUIREMENTS:

4.1. Illumination System - This table shall provide a 9 1/2" X 18" illuminated area for use in viewing single rolls of film between 70mm and 9 1/2" in width. The table shall use an illumination system similar in controllability, color, and light uniformity to the type found on the [redacted] Model 787-1 table (see drawings for detailed description).

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4.1.1. The illumination system must provide at least 2000 foot lamberts at maximum intensity (measured at the illumination surface) with 2500 foot lamberts a design goal. The illumination shall not vary by more than 10% between any two points within the entire illuminated surface area. The illumination intensity

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shall be continuously variable throughout a range of from 10% to 100% of full intensity without evidence of "flicker."

4.1.2. The illumination system shall maintain at least 90% of its original brightness values for the first 2000 hours of operation and at least 75% for the next 2000 hours.

4.1.3. A diffuser such as a 1/8" DuPont Lucite 2447 or equivalent diffuser shall be located between the glass top and the light source.

4.1.4. An adjustable shade must be provided to block out all of the illuminated surface not actually covered by the film. The shade must be located beneath the surface glass, mounted along the long dimension of the unit and extendable across the short dimension toward the side with the fixed film spool holders. The shade must have the capability of being extended, retracted, and locked in any position from 0" to 7" from the side of the illuminating surface at which the shade is mounted. The shade must not encroach upon the illuminated viewing area when the shade is fully retracted. The shade must travel between the top glass plate and the diffuser.

4.2. Film Transport - The film transport system of the Advanced Light Table shall incorporate many of the features found on the [redacted] STAT Model 603 light table. The main points of departure from the [redacted] STAT design will be that the advanced light table is to hold only one roll of film at a time and is to have two modes of operation: either full power drive or a direct ratio manual drive--at the operator's option. The transport system shall be bi-directional and allow for the control of the film movement in either direction by any one of the handwheels or by the power drive control knob. High reliability is mandatory.

4.2.1. The film transport system must be able to accommodate single rolls of film betwen 70mm, and 9 1/2" in width on either partially or fully loaded reels of up to 500-foot capacity. The film spools will be mounted at the ends of the table, parallel with the short axis of the table. The film shall be transported from one spool to the other in either direction over the lighted surface and parallel to the long axis of the table. Rollers must be positioned in such a way as to allow the film to be transported either emulsion up or emulsion down without scratching the film surfaces. The rollers must have a hard, smooth, non-corrosive surface. No adjustable tension rollers (such as found on the earlier prototypes) will be required.

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4.2.2. The manual film drive shall allow for any one of three handwheels to be used to drive the film in either direction, i.e., when the operator faces the long axis of the table and turns either the left or right-hand handwheel clockwise, the film shall move from left to right. When the operator turns either handwheel counter-clockwise, the film shall move from right to left. When the operator faces the short axis of the table with the table tilted toward him and uses the handwheel on his left, the film will move toward him when he turns the handwheel clockwise, and away from him when he turns it counter-clockwise. The manual drive shall have an approximate 1:1 ratio between the handwheels and the spools, i.e., one revolution of the handwheel will result in one revolution of the spool. The drive system shall provide very smooth winding and unwinding of film from either spool. The drive must be a low friction system incorporating both inertia damping and anti-backlash control.

4.2.3. The full power film transport system is to be used mainly for rewinding film at high speed and for constant, relatively low speed scanning. The system therefore, requires an electric drive capable of rewinding a full 500-foot spool of 9 1/2" wide film in less time than it would take an operator to rewind it manually, i.e., in less than two minutes. If necessary, the power drive system may have two speed ranges with a high/low speed range selection switch. The system shall have a single speed control knob (in addition to the optional range switch) which will permit continuous variation of the speed in either direction from 0 to 250-feet per minute (if the optional switch is used, the low range should be from 0 to approximately 100 feet per minute and the high range from 0 to 250 feet per minute, but with less sensitivity in the high range than in the low). The power drive control in the low speed range must permit the same degree of control sensitivity as the manual system. The control knob must have a definite detent for the null position between speed control ranges of the two directions of motion. Again, the system must be a low friction system incorporating inertia damping and anti-backlash control.

4.2.4. Both the manual and the full power drive systems must be able to maintain enough tension on the film at all film speeds and conditions of acceleration and deceleration of the film to prevent slack loops of film from forming.

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4.2.5. Reversing mechanisms shall be included to allow the direction of rotation of the spools to be either in the same or opposite direction from the rotation of the handwheels or power control knob. This is to allow for film transport control to remain the same regardless of whether the film is viewed emulsion up or emulsion down.

4.3. Film Spool Loading and Holding Mechanism - Each film spool shall be held in place by a pair of brackets (one fixed and one movable) with a positive, quick-release spindle on one bracket and a non-sliding spindle on the other. The quick-release spindle shall be the same as or equivalent to that found on the [redacted] Model 603 light table. The fixed brackets shall be on the side of the table which the operator will normally face when he is adjacent to the long axis of the table. If films narrower than 9 1/2" are used, the operator prefers the film to be on the side of the viewing area closest to him and the unused viewing area to be shaded; therefore, the fixed brackets must be on the side of the table closest to the operator, and the shade must come toward him from the opposite side of the table. The movable bracket is to allow for varying width of spools, but it must be possible to lock this bracket in position before the spool is loaded. The spool holding mechanism must firmly support a full, 500-foot spool of 9 1/2" film (or any of the other narrower width films, or any other smaller capacity spool) at any table position in any operation, no matter what the tilt of the table or what the film-transport speed. Index marks must be appropriately placed on the table to reference the bracket positions for 70mm, 5", 6.5", and 9.5" wide film spools.

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4.4. Tilt Mechanism - The [redacted] Model 603 has an acceptable design for tilting the table, except for the noise created when activating the tilting mechanism. It is suggested that a variation of the general design used in the Model 603 be used in the Advanced Prototype. In any case the following specifications must be met.

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4.4.1. Amount and Direction of Tilt. The tilt mechanism must permit the table to tilt from the horizontal to a position of 15°, measured from the vertical when rotated about the short axis, i.e., 75° above the horizontal. This tilt, because of the 9" overall height requirement (when in horizontal mode), may require a movable pivot point and assumes that the base is located at the edge of the table to permit the film spools and transport mechanism to extend out into space and clear the supporting surface. In addition, tilt about the long axis of the table must be equivalent to that stated for the short axis. These motions must be smooth, positive, and continuously variable. Ball joints, while providing the required flexibility of motion, have not proved successful in the past.

4.4.2. Tilt Lock Mechanism. A positive mechanism must be provided to lock the light table in all possible tilted and horizontal positions. This lock must be activated and

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deactivated with only a minimum of force and it must retain its positive locking characteristics under continuous hard usage.

4.4.3. Electrical Wiring. All electrical wiring between the base and the light table must be carried internally or positioned where it cannot be twisted or broken off. This wiring shall not interfere in any manner with the tilting motion of the table.

4.4.4. Balance. The table must be completely stable and remain properly balanced throughout all the possible tilt positions, even with a 500 foot roll of 9 1/2" film on one end and an empty spool on the other.

4.5. General Requirements

4.5.1. The Advanced Light Table Prototype shall meet the highest commerical standards of construction. It must provide a high degree of reliability, i.e., before acceptance, the table will be required to operate under real or simulated conditions for 500 hours (not necessarily continuous) without a failure. Cover plates or access panels or other simple means of reaching the internal portions of the table must be provided for maintaining and repairing the table.

4.5.2. The table must be safety engineered. The unit must be grounded and be free of all shock hazard. All gears and other moving parts, with the exception of the film spool, film, film spool spindles, and controls, must have sufficient shielding to prevent possible accidents. The manual handwheels used for film transport must have interlocks (such as are found on the [redacted] Model 603) to prevent their turning during powered drive.

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4.5.3. The light table must be able to be operated continuously at maximum light intensity or at any lower intensity and in any transport mode or series of modes over a 24-hour period in a room with an 80°F ambient temperature, without exceeding 100°F temperature on any external surface.

4.5.4. The noise generated by the table shall not cause annoyance to either the operator or other workers in the area. The table shall be virtually free of high frequency hum. When neither the film transport nor the table

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tilting mechanism is in operation, but when the light is on and any film tensioning device is on, the noise generated by the table must not be detectable to a broad band sound level meter above the ambient noise level at a distance of two feet from the top-front of the table (the average ambient noise level in a typical work area is 63db measured on the C weighted scale, 51db measured on the B weighted scale, and 45db measured on the A weighted scale of a General Radio Company Type 1565-A Sound Level Meter). Under no circumstances will the noise level of the table measured at a distance of 5' from the table exceed 5db above ambient on the C weighted scale nor 20db above ambient on the A weighted scale of a sound level meter such as the General Radio Company Type 1565-A.

4.5.5. The overall size of the unit shall not exceed 32" in length, 16" in width, and 9" in height when the table is horizontal.

4.5.6. The weight of the table must be considerably reduced from that of the earlier prototypes. A design goal is 60 pounds for the total weight of the unit. These tables are frequently moved, so overall size and weight shall be such that one man can reasonably move the table unassisted.

4.5.7. The main controls of the table shall be placed on the long side of table which the operator shall face when transporting film from right to left or left to right. A power switch must be placed in or near the center of the referenced side, with a power-on warning light above it. This power switch must be easily differentiated from all other switches on the table. The full power transport knob must be on the left of the power switch so that it may easily be reached by the operator regardless of whether he faces the long or short axis of the table or whether the table is tilted or not. The knob must be large enough (possibly 3 inches in diameter) so that it can be easily found by touch and gripped. If the speed-range selection switch is used, it must be adjacent to the speed control knob. The manual film drive handwheels must be positioned in or about the same relative positions as they are on the Model 603 table. The Model 603's handwheels are acceptable, but they could be further improved by using a slightly larger knob (one that could be gripped in the palm of the hand). It is suggested that the illumination intensity knob and shade positioning control be to the right of the power switch. It is also suggested that reversing controls (to change rotation direction of the spools when film is unwound from the top of the

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spool instead of from the bottom) be located on the fixed brackets. The tilt control (either crank or rachet if manual control, or switch if electrical control) shall be located on the base. If a positive tensioning system or an electrical drag or braking system is used in the film transport system, a switch must be provided to cut the power to that system and allow for easy loading and threading of the film. It is suggested that this switch also be placed to the right of the power switch. All controls must be appropriately labeled.

4.5.8. The Advanced Light Table Prototype shall be capable of operating in all modes of operation on 117v + 10v - 15v, 60 cycle AC. The light table shall have proper fusing to prevent overload.

4.5.9. During the period of performance of the contract, the contractor will be required to submit reports to the Government as stated in specification DB-1001. At the point in time when the designs are finalized, a briefing board must be prepared in accordance with specification DB-1002 to show the external configuration of the table. In addition to the briefing board, an updated estimate must be given of the cost per table of a production run in quantities of 25, 50, 75 and 100. At the end of the contract, three operator's manuals and maintenance manuals must be delivered along with the prototype. These manuals must be prepared in accordance with DB-1003. Two complete sets of reproducible engineering drawings will also be required at the end of the contract. Final Acceptance will be made at the Sponsor's facility.

5. PROPOSAL:

Companies interested in bidding on this contract must submit proposals according to the covering letter. The proposal must include an artist's concept (8 1/2" X 11" sketch) of the prototype, a description of the technical approach the company plans to use in accomplishing the tasks, weight and size estimates, cost estimates for the prototype and for production units (in quantities of 25, 50, 75, and 100), time estimates for producing the prototype and for producing production units, and design options with accompanying cost estimates. Also included in the proposal must be a list of anticipated problems in fabricating the prototype and in manufacturing production units. If the bidder does not believe he can meet any part of the specifications, he must state his exceptions in his proposal. If the bidder believes that certain portions of the specifications are too stringent or that the cost to meet these would be excessive, the bidder must bid on the specifications as stated, then point out which portions he believes are too stringent, propose as an option what he believes to be a more reasonable approach, and explain his reasons.

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